

REMARKS

Rejections under 35 U.S.C. § 102

Claims 1-21 stand rejected by the Examiner under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,168,158 issued to David J. McComas et al. ("McComas").

Claims 1-3 and 7 were rejected by the Examiner under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,294,790 issued to Scot R. Weinberger ("Weinberger").

Applicant respectfully submits that the Examiner has erroneously interpreted the function of the grids described in both McComas and Weinberger. Both patents describe a secondary charge generator (foil), which generates charged particles. The charge generator repels the particles toward a detector (microchannel plate), which generates electrons. An anode then detects these electrons. The purpose of the grid in McComas is to retain these electrons between the grid and the detector. (McComas, col. 8, lines 28-29. The purpose of the grid in Weinberger is to maximize electrons that reach the detector. (Col. 10, lines 10 - 15).

Claims 1, 7 and 15 (the independent claims) of the present invention each recite that the grid repels electrons so that they do not reach the detector through the grid. In other words, electrons generated by the foil are repelled from passing through the grid. The Examiner has ignored this limitation of the claims. Applicant respectfully requests reconsideration of this important distinction between McComas and Weinberger and the claims of the present invention.

The Examiner has erroneously relied on McComas (Col. 7, lines 26 - 58). This part of McComas teaches that electrons are accelerated from the foil to the detector. These teachings are to direct electrons through the grid, not away from it. The Examiner has also erroneously relied on Weinberger (Col. 9, lines 1 - 5). This part of Weinberger also teaches that particles are repelled from the particle generator toward the detector (and through the grid).

In fact, Weinberger teaches away from using the grid to repel particles. Weinberger teaches that the field between the particle generator and the grid is maintained for "strongly directing the sputtered products through the field retaining grid...." (Col. 10, lines 3 - 6). Weinberger further states that the field between the particle generator and the grid is

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maintained " so that a maximum amount of disbursed sputtered product strikes the conversion surface of first MCP...." (Col. 10, lines 10 -15). Clearly, the grid is used to assist particles in reaching the detector, not to deter them.

For these reasons, the claims of the present invention are neither anticipated by, or obvious from, the teachings of McComas and Weinberger.

CONCLUSION

Applicant has made an earnest effort to place this case in condition for examination and allowance. Applicant respectfully requests reconsideration of the application and allowance of the pending claims.

The Commissioner is hereby authorized to charge any fees to Deposit Account No. 50-2148 of Baker Botts L.L.P. in order to effectuate this filing.

If there are any matters concerning this Application that may be cleared up in a telephone conversation, please contact Applicant's attorney at 512.322.2634.

Respectfully submitted,

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